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NHTSA 99-6550-12

Mr. Stephen R. Kratzke
Acting Associate Administrator for Safety Performance Standards
National Highway Traffic Safety Administration
400 Seventh Street, S. W.
Washington, D.C. 20590

Subject: Federal Motor Vehicle Safety Standard: Heavy Vehicle Antilock Brake System Performance Requirement NPRM – Docket No 99-6550 (Federal Register Vol. 64, No. 244, pages 71377-71388, December 21, 1999)

Dear. Mr. Kratzke,

Ford Motor Company (Ford), a domestic manufacturer and importer of motor vehicles with offices at The American Road, Dearborn, Michigan 48121-1899 submits the following comments to the referenced Notice of Proposed Rulemaking (NPRM). The NPRM proposes to extend the braking-in-a-curve test requirements on truck tractors to single-unit trucks and buses with slight modifications: to the test provisions beginning two years after publication of the final rule in the Federal Register.

Ford participated in developing the Truck Manufacturers Association (TMA) comments and is in agreement with the TMA comments. However, TMA does not generally address issues related to vehicles under 19,500 lbs GVWR; we are therefore submitting our own comments to supplement and complement the comments submitted by TMA.

Ford agrees with the majority of NHTSA's proposed test modifications. However, we believe that certain of these requirements introduce unnecessary complexity when extended to single-unit trucks and buses. These points and others are addressed in the comments that follow.

Section III. B. Testing in the Loaded/GVWR Conditions

NHTSA specifically requested comments on testing at GVWR. We would like to emphasize our support of the TMA response on this point. Ford participated in the SAE Truck and Bus Vehicle Deceleration and Stability Subcommittee discussions from 1995 to present where it was agreed that braking-in-a-curve testing of medium and heavy vehicles is only required at the lightly loaded test condition and that testing at other weights would not provide additional useful information. This recommendation was based on comparative test results of medium and heavy trucks and buses tested in both the lightly loaded and loaded to GVWR test conditions (please reference the TMA comments and database). TMA test results indicated that for 29 out of 31 vehicles, the lightly loaded test condition was equal to or worse than the loaded test condition. The two tests in which the lightly loaded test condition was not the worse case involved heavy trucks, which completed the test with sufficient compliance margins. Therefore, Ford requests that NHTSA follow TMA's and SAE's recommendations to eliminate the loaded test condition for braking-in-a-curve testing of single unit trucks and buses.

Section III. M. Test Sequence

If NHTSA agrees to eliminate the loaded test condition as discussed above, further testing efficiencies would be achieved by eliminating a loading/unloading cycle for single unit trucks and buses. We understand that in developing this proposal NHTSA retained the same test sequence used in existing tractor trailer regulations. However, tractor trailers are much easier to load and unload using hitching mechanisms, as compared to single unit trucks and buses. Single unit trucks require mounting load blocks or boxes to a load bed to achieve the loaded condition. For single unit trucks, loading and unloading adds significant test time and complexity. Ford recommends that the test sequence, after eliminating the loaded condition for the braking-in-a-curve tests, could be to first conduct burnish and straight stops, etc., in the loaded condition and then conduct braking-in-a-curve tests followed by straight stops in the lightly loaded condition.

Section III. N. Special Drive Considerations

NHTSA specifically requested comments on Section *III. N.* Special Drive Considerations. We agree that vehicles with interlocking axles or front wheel drive systems, which the driver engages or disengages, should be tested with such systems disengaged. FMVSS 121, Air Brake Systems, Section 6.1.11 currently reflects this provision. Ford recommends that NHTSA amend FMVSS 105 to also reflect this provision and to be consistent with FMVSS 121.

Final Recommendations

Ford agrees with the majority of NHTSA's proposed test requirements and believes the modifications suggested above could improve test expediency and resource effectiveness while maintaining the same safety performance goal, which is to improve the directional stability and control of these vehicles during braking.

Please contact Sarah Kirkish at 313-323-7388 or skirkish@ford.com if you have any questions or require further information.

Sincerely,

L. W. Camp